Please cancel Claims 14-37 as being drawn to a nonelected invention.

Please amend Claim 1 to read follows. (A "marked-up" version of Claim 1 appears in an appendix.)

1. (once amended) A method for assaying angiogenesis *ex vivo*, said method comprising the steps of:

(a) embedding a three-dimensional mammalian tissue sample in a matrix, wherein the tissue sample has at least one cut surface exposing blood vessels; wherein the three-dimensional tissue sample comprises multiple layers of cells comprising blood vessels and other cells of the tissue; and wherein the architecture of the tissue sample, including blood vessels, supportive stromal elements, neural cells, and endothelial cells, is substantially intact and has not been disrupted as compared to that of comparable tissue *in vivo*; and wherein the three-dimensional tissue sample does not consist of an isolated artery or an isolated vein;

(b) supplying to the embedded tissue sample a medium that supports the growth of the tissue sample;

(c) incubating the embedded tissue sample in the medium for a time sufficient to allow angiogenic vessels, if any, to grow into the matrix surrounding the tissue sample; and

(d) observing or measuring the angiogenic vessels, if any, that grow into the matrix surrounding the tissue sample.

Please add new Claims 38-41:

38. (new) A method as recited in Claim 1, wherein the tissue sample is a sample taken from a tumor; and wherein said method additionally comprises the step of supplying an angiogenic suppression factor to the embedded tumor sample, and measuring the difference in angiogenesis for the tumor sample as compared to the angiogenesis of an otherwise identical and otherwise identically-treated control tumor sample that is not supplied with the factor; whereby the measured difference in angiogenesis between the samples is a measure of the angiogenic suppression characteristics of the supplied factor against the tumor from which the sample was taken.

39. (new) A method as recited in Claim 1, wherein said method additionally comprises the step of supplying an angiogenic stimulation factor to the embedded tissue sample, and measuring the difference in angiogenesis for the tissue sample as compared to the angiogenesis of an otherwise identical and otherwise identically-treated control tissue sample that is not supplied with the factor; whereby the measured difference in angiogenesis between the samples is a measure of the angiogenic stimulation characteristics of the supplied factor for the tissue from which the sample was taken.

40. (new) A method as recited in Claim 39, wherein the tissue sample is selected from the group consisting of tissue from a wound, cardiac muscle tissue, skeletal muscle tissue, a transplanted tissue, thyroid tissue, parathyroid tissue, pancreatic tissue, pituitary tissue, adrenal tissue, pancreatic tissue, kidney tissue, liver tissue, skin tissue, prostate tissue, and retinal tissue.

41. (new) A method as recited in Claim 40, wherein the tissue sample is cardiac muscle tissue.